UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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OFFICE OF
ENVIRONMENTAL CLEANUP

SEP 3 0 2010

MEMORANDUM

SUBJECT: Action Memorandum for an Emergency Removal Action at the Orofino Asbestos Site, Orofino, Clearwater County, Idaho

FROM: Earl Liverman, On-Scene Coordinator
Emergency Response Unit

THRU: Chris D. Field, Manager
Emergency Response Unit

Cliff Villa, Assistant Regional Counsel
Office of Regional Counsel

TO: Daniel D. Opalski, Director
Office of Environmental Cleanup

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the selected emergency removal action described herein for the Orofino Asbestos Site (Site) in Orofino, Clearwater County, Idaho.

The proposed emergency removal action is to remove and properly dispose of hazardous substances at the Site that are releasing or pose a threat of release to the environment, and remove and properly dispose of soils at the Site that are contaminated with hazardous substances, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

II. SITE CONDITIONS AND BACKGROUND

The CERCLIS ID is IDN001002885 and the Site ID is 10JN.

A. Site Description

1. Removal Site Evaluation

In May 2010, a complaint was received by the EPA regarding the illegal disposal of asbestos cement pipe (ACP). The complainant alleged that in 2009, the Riverside Water and Sewer District (District) in the City of Orofino awarded a contract to Owyhee for the

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construction of waterline improvements for the District, and that Owyhee placed excavated soil containing ACP as fill material on a vacant lot in the City.

EPA June 2010 Site Visits

In response to the foregoing complaint, EPA On-Scene Coordinator (OSC) Earl Liverman met with the complainant at the vacant lot on 25 June 2010. OSC Liverman observed many scattered pieces of suspected ACP laying on the ground surface. The sizes ranged from 2 to 3 inches in length and width to greater than 6 inches in length and 3 to 4 inches in width. All ACP pieces appeared weathered, the edges were crumbled, and potential asbestos fibers were observed at the edges.

On behalf of the property owner, Riverview Construction, John Anderson, Partner, granted OSC Liverman entry and access to the Site on 28 June 2010. During the conversation, John Anderson stated that over the course of several months, Owyhee placed an estimated 15,000 to 25,000 cubic yards of fill material on the property and that the material was placed by dump truck and then spread by bulldozer. OSC Liverman returned to the Site on 29 June 2010 and collected three random grab samples of suspected ACP. The samples were analyzed using Polarized Light Microscopy (PLM) analysis to determine asbestos form variety and percent concentration. The data showed asbestos concentrations of 8%, 9%, and 9% chrysotile mineral fibers.[1]

EPA August 2010 Site Visit

EPA continued to investigate the original complaint. Six additional locations where Owyhee allegedly placed excavated soil containing ACP as fill material were identified in the City of Orofino and Clearwater County. OSC Liverman and EPA's START Contractor visited the locations on 8 and 9 August 2010. At four of the six locations, EPA observed many scattered pieces of suspected ACP laying on the ground surface that were similar to the ACP observed during the June Site visits. The sizes ranged from 2 to 3 inches in length and width to greater than 6 inches in length and 3 to 4 inches in width. All ACP pieces appeared weathered, the edges were crumbled, and potential asbestos fibers were observed at the edges. At one of the four locations, EPA observed 2- to 3-foot sections of ACP laying on the ground surface. At a fifth location, EPA did not observe ACP on the ground surface, and at a sixth location, EPA observed suspected transite siding in fill material, as opposed to ACP.

All but one of the affected landowners described a similar process for placement of the ACP-contaminated fill material (i.e., the fill material was placed by dump truck and then spread by bulldozer). EPA was granted entry and access from the landowners and collected grab samples of suspected ACP, transite siding, and surface soil. The suspected ACP, transite siding, and soil samples were analyzed using PLM and Transmission Electron Microscopy (TEM) analyses to determine asbestos form variety and percent concentration. The data for four ACP samples showed chrysotile asbestos concentrations of 7%, 16.68%, 16.82%, and 20%; for four

[1] Ecology and Environment, Inc. (E&E). Memorandum from Mark Woodke, START-3 Chemist, E&E, Seattle, WA. 2 July 2010. Subject: Data Quality Assurance Review, Owyhee Construction Site, Orofino, ID.

soil samples, the data showed non-detect for two samples and 0.25% and 0.75% chrysotile for the two remaining samples; and the one transite siding sample showed 3% chrysotile.[2]

2. Physical Location

The seven locations where soil containing ACP or transite siding was placed as fill material are located within the City of Orofino or immediately outside the City limits in Clearwater County (Figure 1). The approximate latitude and longitude for the Site is 46°28.41'11"N and 116°15.10'57"W.

Pursuant to the PRP-lead interim removal action discussed below in Section II(B)(1), access to the vacant lot identified above (aka Riverview Construction Site) is restricted by fencing; however, access to the other locations is unrestricted. All locations are situated in mixed neighborhoods composed of commercial, residential, and religious properties.

There are no known vulnerable or sensitive populations, habitats, or natural resources or potential historical landmarks and/or structures with historical significance identified where excavated soil containing ACP and transite siding was placed.

3. Site Characteristics

Orofino is a rural community located in the North Central Region of Idaho along Orofino Creek and the north bank of the Clearwater River. The population is approximately 3,300, and the city is the county seat for Clearwater County.

A PRP-lead interim removal action was recently completed at the Riverview Construction Site as discussed in Section II(B)(1).

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The contaminant of concern is asbestos. Asbestos is a hazardous substance or pollutant or contaminant as defined by sections 101(14) and 101(33) of CERCLA, as amended, 42 U.S.C. section 9601(14) and (33).

The analytical results shown below indicate that asbestos fibers, ACP, and transite siding are present on the ground at the Sites. With time and exposure to damaging mechanical forces and weather, the ACP and transite siding can continue to become friable thus releasing asbestos fibers to the environment.

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[2] Ecology and Environment, Inc. (E&E). Memorandum from Mark Woodke, START-3 Chemist, E&E, Seattle, WA. 27 August 2010. Subject: Data Quality Assuranve Review, Owyhee Construction Site, Orofino, ID.

Site Addresses and Analytical Data	
Address	**Analytical Data**
(b) (6) , Orofino, ID	S1 = ACP/PLM 20% Chrysotile S2 = Soil/PLM 0.25% Chrysotile
(b) (6) , Orofino, ID	S3 = ACP/TEM 16.68% Chrysotile S4 = Soil/PLM No asbestos detected
291 118th Street, Orofino, ID	S5 = Soil//PLM 0.75% Chrysotile S6 = ACP/TEM 16.82% Chrysotile
(b) (6) ; Orofino, ID	S7 = ACP/PLM 7% Chrysotile S8 = Soil/PLM No asbestos detected
4753 Transfer Station Road, Orofino, ID	Site received excavated material but did not sample because no suspected ACP observed
(b) (6) , Orofino, ID	S9 = Transite siding PLM 3% Chrysotile
12976 Highway 12, Orofino, ID Parcel RPA 00450000050A	S1 = ACP/PLM 9% Chrysotile S2 = ACP/PLM 8% Chrysotile S3 = ACP/PLM 9% Chrysotile

5. NPL Status

The site is not listed on the National Priorities List (NPL) nor has the site been proposed for the NPL.

6. Maps, figures, and other graphic representations

Refer to Figure 1 (Site Locations).

B. Other Actions to Date

1. Previous Actions

EPA and Riverview Construction and Owyhee entered into an Administrative Settlement Agreement and Order on Consent (ASAOC) (CERCLA Docket No. 10-2010-0213) dated 9 August 2010 for an interim removal action to be conducted at the vacant lot (aka Riverview Construction Site) discussed above in Section II(A)(1). The ASAOC requires Owyhee and/or Riverview Construction to control for fugitive dust, construct a temporary fence around the area where asbestos contaminated material was placed as fill, and install appropriate signage on the fencing to discourage trespass.[3] This work was completed by Owyhee the week of 30 August 2010.

[3] U.S. Environmental Protection Agency. Action Memorandum for an Interim Removal Action to Be Conducted at the Riverview Construction Asbestos Site, Orofino, Clearwater County, Idaho. 22 July 2010.

2. Current Actions

There are no other ongoing removal activities undertaken by other government or private parties at the other locations.

C. State and Local Authorities' Roles

1. State and Local Actions to Date

State and local authorities, including the Idaho State Department of Environmental Quality, Clearwater County Commissioners, the Idaho North Central Health District, and the City of Orofino are aware of the Site and the threats posed by asbestos, and are supportive of cleanup actions to address the asbestos containing backfill material.

2. Potential for continued State/Local Response

EPA will continue to work with State and local authorities to ensure that they are aware of cleanup activities.

III. THREATS TO PUBLIC HEALTH WELFARE OR ENVIRONMENT

The current conditions at this Site meet the following factors which indicate that the Site is a threat to the public health or welfare or the environment, and a removal action is appropriate under § 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

A. Threat to Public Health or Welfare

1. Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants [300.415(b)(2)(i)].

The elevated concentrations of chrysotile asbestos found at the Site indicate that the potential for inhalation exposures exists.

There is not a known safe level or period of asbestos exposure. Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the amount of fibers that remain in the lungs. Fibers embedded in lung tissue over time may cause serious lung diseases, including asbestosis, lung cancer, or mesothelioma.

2. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate [300.415(b)(2)(iv)].

The analytical results show that asbestos fibers and ACP and transite siding are present on the ground surface at the Site. There are several pathways by which the asbestos fibers can become entrained in air leading to inhalation exposures (e.g., fibers can enter the air from the wearing down of the ACP and transite siding found on site). With time and exposure to damaging mechanical forces and weather, the ACP and transite siding may become further crumbled, pulverized, or reduced to powder, thereby releasing asbestos fibers, or may deteriorate to the extent that they may release asbestos fibers if disturbed.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released [300.415(b)(2)(v)].

Asbestos fibers and ACP and transite siding are present on the ground at the Site. Wind, particularly in dry summer months, can lead to the migration of small asbestos fibers, and fiber-containing particles may remain suspended in the air for a long time and be carried long distances by wind before settling. Rainfall runoff may also result in the off-site transport of asbestos fibers. Additionally, as shown in the following table, the accumulative effect of successive freeze-thaw temperature cycles can cause expansion, cracking, and crumbling of the ACP and transite siding, thus releasing asbestos fibers into the environment.

Average Temperatures[4] Period of Record: 08/01/1948 – 12/30/1981 (degrees Fahrenheit)					
Average Monthly	November	December	January	February	March
Minimum	32.0	27.7	24.0	28.9	31.4
Maximum	48.0	40.0	37.6	46.9	54.6

4. The availability of other appropriate federal or state response mechanisms to respond to the release [300.415(b)(2)(vii)].

No other federal or state agency has the capacity or willingness to perform the removal action in a timely manner.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

[4] Western Regional Climate Center, wrcc@dri.edu

V. PROPOSED ACTIONS AND ESTIMATED COSTS

Based on the analysis of the nature and extent of Site contamination and affected landowner preferences for cleanup, the following emergency removal action is proposed to address the public health and welfare threats discussed in Section III of this Action Memorandum.

A. Proposed Actions

1. Proposed Action Description

Excavation and Disposal of Asbestos Contaminated Materials

Based on EPA's evaluation of the asbestos release, all fill material placed by Owyhee at different locations as part of the 2009 District waterline improvements is presumed contaminated with asbestos and/or friable asbestos-containing material such as ACP and transite siding (i.e., ACP was removed through the use of hydraulic excavators and/or backhoes, and the ACP contaminated material was placed by dump truck and then spread by bulldozer). All cleanup activities will be coordinated with affected property owners. An estimated ± 21,550 cubic yards (yds^3) of asbestos contaminated fill material will be excavated to the underlying native material, and this material will be shipped off site for disposal at a facility operating in compliance with the Resource Conservation and Recovery Act (RCRA) or other applicable Federal or state requirements. The native material will be determined visually, and then the excavated area will be over-excavated by no more than an additional 6 inches to ensure that all asbestos is removed. One or more composite random soil samples will be collected and analyzed using PLM analysis to confirm removal of asbestos. Only the over-excavated native material will be backfilled with clean material such as gravel or soil; the excavated contaminated material will not be replaced. An estimated ± 4,875 yds^3 of clean fill material is required to fill over-excavated areas. Disturbed areas will be graded to ensure proper surface water drainage, and hydroseeded or sodded, where appropriate.

All asbestos-contaminated materials and soil will be properly handled, packaged, and transported to an approved National Emissions Standards for Hazardous Air Pollutants (NESHAP) asbestos landfill. The contaminated materials will only be disposed of at a facility in compliance with the Off-Site Rule set forth in the NCP, at 40 CFR 300.440.

Additional Disposal Locations

EPA continues to investigate where fill material may have been placed as part of the 2009 waterline improvements for the District. If other locations are identified, those locations will be evaluated and may be included within the scope of this removal action.

Best-Management Practices (BMPs):

Temporary Best Management Practices (BMPs) will be implemented during cleanup activities to protect workers and the public from short-term construction impacts such as erosion, fugitive dust, and other similar potential impacts.

Post removal site controls

Post removal site control will not be required because asbestos contaminated materials and soils will be removed from the Site.

2. Contribution to remedial performance

The proposed action is designed to be the first and only action to cleanup asbestos contaminated materials found on the properties identified in this Action Memorandum. However, if future actions are required, the proposed removal action will likely not impede those actions based upon available information.

3 Applicable or relevant and appropriate requirements (ARARs)

The NCP requires that removal actions attain Applicable or Relevant and Appropriate Requirements (ARARs) under federal or state environment or facility siting laws, to the extent practicable. (40 CFR § 300.415[j]) In determining whether compliance with ARARs is practicable, EPA may consider the scope of the removal action and the urgency of the situation. (40 CFR § 300.415[j]) The scope of the removal action proposed in this Action Memorandum is limited. .

National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subpart M. Subpart M addresses milling, manufacturing, and fabricating operations, demolition and renovation activities, waste disposal issues, active and inactive waste disposal sites, and asbestos conversion processes. Subpart M is potentially applicable to the handling, packaging, labeling, transportation, and disposal of asbestos-containing material.

4. Project Schedule

The proposed removal action must be initiated as soon as possible. Access is unrestricted and the ACP is in the open and exposed to wind and other elements except at the property located at 12976 Highway 12 (aka Riverview Construction Site) where an interim action was performed. It is anticipated that the proposed project will require seven weeks to complete and that it will begin during the 2010 field construction season.

B. Estimated Costs

EPA extramural costs for conducting the removal action described herein are estimated below:

Extramural Costs:	
Regional Removal Allowance Costs: Total Cleanup Contractor Costs	$650,000
Other Extramural Costs Not Funded from the Regional Allowance: Total START Costs	$ 50,000
Subtotal Extramural Costs	$700,000
Extramural Costs Contingency (20%)	$140,000
TOTAL REMOVAL ACTION PROJECT CEILING	$840,000

The project ceiling does not include estimates of other costs -- such as intramural direct labor, travel, and indirect costs, and subsequent enforcement costs -- that are recoverable under Section 107 of CERCLA.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If the proposed removal action should be delayed or not taken, asbestos will remain as a potential human health threat, and may spread from the Site to adjoining properties.

VII. OUTSTANDING POLICY ISSUES

None

VIII. ENFORCEMENT

See the attached "Confidential Enforcement Addendum" for enforcement details.

IX. RECOMMENDATION

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and is consistent with the National Contingency Plan. This decision is based on the administrative record for the Site.

Conditions at Orofino Asbestos Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling if approved will be $840,000. Of this amount, as much as $650,000 comes from the Regional Removal Allowance

X. APPROVAL / DISAPPROVAL

X Approval

30 Sept. 2010

Daniel D. Opalski, Director
Office of Environmental Cleanup

Date

____ Disapproval

_____ _____

Daniel D. Opalski, Director
Office of Environmental Cleanup

Date

XI. Site Determination

Under the authority vested in the President of the United States by Section 104(d)(4) of CERCLA, 42 U.S.C. § 9604(d)(4), as amended, and delegated to the Administrator of the EPA by Executive Order No. 12580, 23 January 1987, 52 Federal Register 2923, and further delegated to the Assistant Administrator for Solid Waste and Emergency Response and Regional Administrators by EPA Delegation No. 14-2 and further delegated to the Director of the Office of Environmental Cleanup, Region 10, by EPA Delegations No. R10 14-2, these noncontiguous facilities will be treated as one for purposes of response actions because they are reasonably related on the basis of geography and threat, or potential threat, to the public health or welfare or the environment.

30 Sept 2010

Daniel D. Opalski, Director

Date

XII. ATTACHMENT

- Figure 1 (Site Locations)

FIGURE 1
SITE LOCATION

OROFINO, IDAHO